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REP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Krieg
Divisional of Serial No: 08/960,774
Filed: October 30, 1997
For: METHODS OF REDIRECTING AN IMMUNE RESPONSE
USING IMMUNOSTIMULATORY OLIGONUCLEOTIDES

Box: Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please amend the Application as follows:

Please cancel claims 2-41.

Please add the following new claims:

Sub B.1
42. A method for redirecting a subject's immune response from a Th2 to a Th1 comprising the step of administering to the subject an immunostimulatory nucleic acid, having the following formula:

5' X₁X₂ CGX₃X₄ 3'

wherein C and G are unmethylated, wherein X₁, X₂, X₃, and X₄ are nucleotides, wherein the nucleic acid has between only 8 and 100 nucleotides.

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43. The method of claim 42, wherein the 5' X₁ X₂CGX₃ X₄3' sequence is a non-palindromic sequence.

44. The method of claim 42, wherein the nucleic acid has 8 to 100 nucleotides.

Subst. F
45. The method of claim 42, wherein the nucleic acid backbone includes the phosphate backbone modification on the 5' side of the nucleic acid.

46. The method of claim 42, wherein the nucleic acid backbone includes the phosphate backbone modification on the 3' side of the nucleic acid.